

303 R0.500"

## Work Order ID 77048

\*77048\*

Page 1

November-25-11 8:30:17 AM

Item ID: D3439-3

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Stud

Start Date: 25/11/2011 Start Qty: 40.00

\*40\*

Cust Item ID:

Required Date: 09/12/2011 Req'd Qty: 40.00

\*40\*

Customer:

Reference:

Approvals:

Process Plan: M.L.5

Date: 11/11/25 Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3439

B

100

0.00

\*100\*

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

TURN AS PER FOLIO FA959

FOLIO REV: N/A

DWG REV: B

DEBURR

40 0 11/12/22

110

QC2- Inspect parts off machine FAI/FAIB

0.00

\*110\*

QC

Memo

0.00

Quality Control

40 0 11/12/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 77048

**\*77048\***

Page 2

November-25-11 8:30:17 AM

Item ID: D3439-3 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Stud  
 Start Date: 25/11/2011 Start Qty: 40.00 **\*40\*** Cust Item ID:  
 Required Date: 09/12/2011 Req'd Qty: 40.00 **\*40\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC Quality Control	QC8- Inspect parts - second check  Memo	0.00  0.00				40	0		
130 <b>*130*</b> Packaging Packaging	Identify as per dwg & Stock Location: <b>STGA</b>  Memo	0.00  0.00							
140 <b>*140*</b> QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							

11-12-23

11-12-23

11/12/28

11/12-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

November-25-11 8:30:21 AM

Page 1

Work Order ID: 77048

\*77048\*

Parent Item: D3439-3

\*D3439-3\*

Parent Item Name: Stud

Start Date: 25/11/2011

Required Date: 09/12/2011

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP Rev:A 10.09.08 new issue verf:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M303R0.500

Purchased

No

100

f

473.8660

0.113

4.757895

\*M303R0 500\*

\*\*

4.583'

SL 11/12/22

303 Round Bar 0.500"

## Location

## Loc Qty

## Loc Code

MAT028

473.866

117143

11.34

118271

11.9

118509

12.69

119009

269.936

119616

168

4.583'

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



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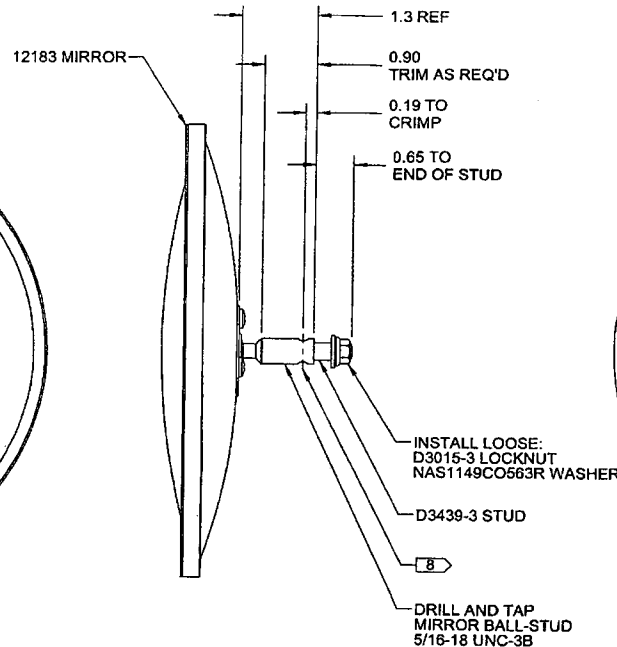
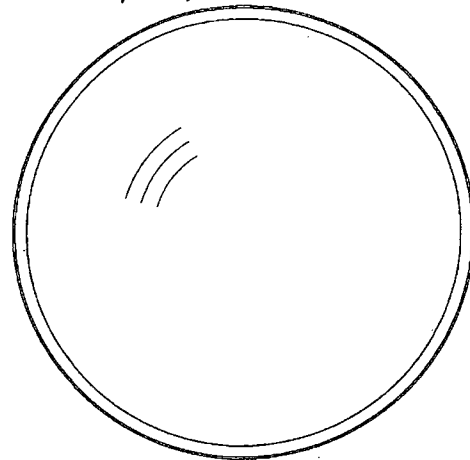
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SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 77048 M-LJ  
11/11/25



PLUG DRAIN HOLES WITH  
SIKAFLEX-241/291 OR PROSEAL 890.  
ENSURE MIRROR ADHERES TO HOUSING.  
3 PL

ADJUSTMENT SCREWS  
SUPPLIED WITH MIRROR,  
3 PL REF


### D3439-101 MIRROR ASSEMBLY

#### NOTES:

- 1) MATERIAL: MIRROR= 8" ROUND CONVEX MIRROR W/ STAINLESS STEEL CASE  
CENTER-MOUNT BALL-STUD W/ 1/4-20 X 1" DEEP FEMALE THREAD  
GROTE INDUSTRIES, 2600 LANIER DRIVE, MADISON, INDIANA 47250
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3439-101" USING REMOVEABLE TAG
- 7) WEIGHT: 1.18 lbs
- 8) TO INSTALL D3439-3 STUD:
  - APPLY LOCKTITE 262 TO THREADS BEING INSTALLED INTO MIRROR BALL-STUD
  - THREAD D3439-3 STUD INTO MIRROR BALL-STUD
  - CRIMP MIRROR BALL-STUD ON OPPOSING SIDES, 0.19 FROM END AS ILLUSTRATED USING TOOL DT8317
  - CRIMP TO DEPTH OF 0.015-0.030 USING R0.125

ITEM	QTY	P/N	DESCRIPTION
1	X	D3439-101	MIRROR ASSEMBLY, 8"
2	1	12183	MIRROR 8" (GROTE)
3	1	D3015-3	LOCKNUT
4	1	D3439-3	STUD
5	1	NAS1149CO563R	WASHER (OR AN960JD516)

RELEASED  
2010-09-07  
AM

B	REDRAW, ADD -3 (WAS PURCHASED/TRIMMED BOLT), RMV LPS	CP	10.07.20
A	NEW ISSUE	CP	05.05.27
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3439	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		MIRROR ASSEMBLY	NTS
DATE		10.07.20	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

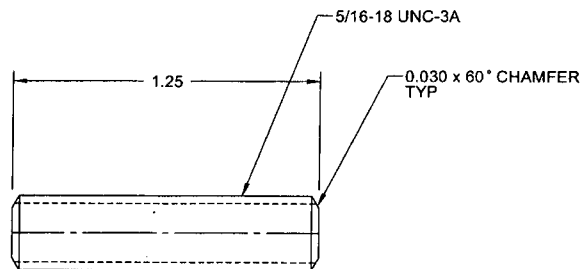
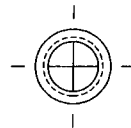
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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77078






**D3439-3 STUD** 

**NOTES:**

- 1) MATERIAL: AISI 303 STAINLESS STEEL ROUND BAR PER ASTM A582  
REF DART SPEC M303R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

**RELEASED**  
2010-09-07

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3439	SHEET 2 OF 2
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DE APPR.		MIRROR ASSEMBLY	NTS
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